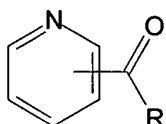


CLAIMS

1. A chemical complex comprising:

5 i) a substituted or unsubstituted pyridine carboxy derivative according to formula 1



Formula 1

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wherein R is selected from the group consisting of OH; OR'; NH₂; NHR'; NR'R'', O⁻Y⁺, and halogen, wherein R' and R'' are independently selected from substituted and unsubstituted C₁-C₂₀ alkyl; and Y is a base addition salt of the free carboxylate; and

15 ii) an H₂ histamine receptor antagonist.

2. A chemical complex according to claim 1, wherein the pyridine carboxy derivative of formula I is niacinamide.

20 3. A chemical complex according to claim 1, wherein the H₂ histamine receptor antagonist is selected from the group consisting of ranitidine, cimetidine, famotidine, nizatidine and derivatives thereof.

4. A chemical complex according to any one of claims 1 to 3, wherein the molar ratio
25 or weight ratio between the pyridine amide and the H₂ histamine receptor antagonist is in the range of 1:10000 to 10000:1.

5. A chemical complex according to claim 4, further comprising a pharmaceutically acceptable carrier.

6. A pharmaceutical composition comprising:

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i) a chemical complex as defined in any one of claims 1 to 3; and

ii) a pharmaceutically acceptable carrier.

10 7. The use of a chemical complex as defined in claim 1, or a composition comprising said complex for:

(a) the preparation of a medicament or a dietary supplement for immunomodulation in a mammal;

15 (b) for the preparation of a medicament or a dietary supplement for the suppression of hypersensitivity and/or inflammatory reaction in a mammal;

(c) for the preparation of a medicament for the treatment or prevention of atopic eczema, contact dermatitis, seborrhoeic eczema and/or psoriasis in a mammal;

20 (d) for the preparation of a medicament for the treatment or prevention of IgE mediated allergic reaction and/or condition in a mammal;

(e) for the preparation of a medicament for the alleviation of pain in a mammal; or

(f) for the preparation of a medicament or a dietary supplement for the treatment or prevention of cancer in a mammal.

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8. The use according to claim 7, wherein the medicament or the dietary supplement is for the treatment or prevention of hypersensitivity skin disease in a mammal.

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9. The use according to claim 7, wherein the medicament or the dietary supplement is for the treatment or prevention of asthma, allergic rhinitis, and/or anaphylaxis in a mammal.
- 5 10. The use according to claim 7, wherein the medicament or the dietary supplement is for the treatment or prevention of autoimmune disease and/or chronic inflammatory disease in a mammal.
11. The use according to claim 7, wherein the medicament or the dietary supplement
10 is for the treatment or prevention of Crohn's disease, ulcerative colitis, rheumatoid arthritis, gout or osteoarthritis in a mammal.
12. The use according to claim 7, wherein the mammal is a human.
- 15 13. A method for immunomodulation in a mammal, which comprises administering a chemical complex as defined in any one of claims 1 to 3 or a composition comprising said complex to said mammal.
14. A method for the suppression of hypersensitivity and/or inflammatory reaction in a
20 mammal, which comprises administering chemical complex as defined in any one of claims 1 to 3 or a composition comprising said complex to said mammal.
15. A method for the treatment or prevention of hypersensitivity skin disease in a mammal, which comprises administering a chemical complex as defined in any one
25 of claims 1 to 3 or a composition comprising said complex to said mammal.
16. A method for the treatment or prevention of atopic eczema, contact dermatitis, seborrhoeic eczema and/or psoriasis in a mammal, which comprises administering a chemical complex as defined in any one of claims 1 to 3 or a composition comprising
30 said complex to said mammal.

17. A method for the treatment or prevention of IgE mediated allergic reaction and/or condition in a mammal, which comprises administering a chemical complex as defined in any one of claims 1 to 3 or a composition comprising said complex to said
5 mammal.

18. A method for the treatment or prevention of asthma, allergic rhinitis, and/or anaphylaxis in a mammal, which comprises administering a chemical complex as defined in any one of claims 1 to 3 or a composition comprising said complex to said
10 mammal.

19. A method for the treatment or prevention of autoimmune disease and/or chronic inflammatory disease in a mammal, which comprises administering a chemical complex as defined in any one of claims 1 to 3 or a composition comprising said
15 complex to said mammal.

20. A method for the treatment or prevention of Crohn's disease, ulcerative colitis, rheumatoid arthritis, gout or osteoarthritis in a mammal, which comprises administering a chemical complex as defined in any one of claims 1 to 3 or a
20 composition comprising said complex to said mammal.

21. A method for the alleviation of pain in a mammal, which comprises administering a chemical complex as defined in any one of claims 1 to 3 or a composition comprising said complex to said mammal.
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22. A method for the treatment or prevention of cancer in a mammal, which comprises a chemical complex as defined in any one of claims 1 to 3 or a composition comprising said complex to said mammal.

30 23. A method according to claim 13, wherein the mammal is a human.